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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,709	06/25/2003	Joseph C. Tyler	VSSI-0004	3462

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HOFFMAN WARNICK & D'ALESSANDRO, LLC  
75 STATE STREET  
14TH FL  
ALBANY, NY 12207

EXAMINER

HILLERY, NATHAN

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/603,709

Applicant(s)

TYLER, JOSEPH C.

Examiner

Nathan Hillery

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to communications: Status filed on 6/27/05.
2. Claims 1 – 20 are pending in the case. Claims 1, 10, and 16 are independent.

### ***Drawings***

#### **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

##### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

##### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

##### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

Art Unit: 2176

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because illegibility – handwritten portions are not clear. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 8, and 10 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall (US 6915334 B1).

6. **Regarding independent claim 10**, Hall teaches that *in accordance with one embodiment of the present invention, a spam address list is partitioned into m sublists, m different versions of the message are created, and a different version of the message is sent to the recipients on each sublist. It is advantageous to partition an address list into m sublists by randomly assigning each address on the list to one of the m sublists. This advantageously helps avoid placing two addresses that occur nearby each other*

*on the list to the same sublist. Nearby addresses on the list may be to the same mailbox. If two such addresses appear on the same sublist, then the same version is sent to the two addresses, and the message is disadvantageously detectable as spam* (Column 2, line 63 – Column 3, line 9) and that *Note that if the spammer wished to defeat only MF, he would have no need to re-randomize the list each time. Simply cyclically permuting the message versions among the sublists each time would achieve slightly more message considerations (exactly  $k$  instead of almost  $k$  per user).*

*However, this approach would be worse against FDD, because exactly the same set of users would get the message each time, whereas by re-randomizing each time, the spammer will evade the FDD filters of a different subset of FDD users each time.*

*Similar reasoning applies to make randomizing slightly more effective against CF as well. This choice is obviously a trade off that must be made based on the expected mix of techniques used by the target user population* (Column 12, lines 10 – 23), compare with **creating a message specification; generating a message based on the message specification; assessing whether the message is likely to be flagged as spam; and delivering the message to a targeted group of users.** Hall does not explicitly teach **a message specification associated with a website**; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to be well-aware that most spammers spam users with messages in order to advertise their products and/or services, which are usually displayed on a website to make it convenient for the recipients to better understand and/or visualize that being advertised in the message(s) by electronically visiting the spammer's website while still online.

7. **Regarding dependent claim 11**, Hall teaches that *Another way to partition an address list into m sublists is to use any information available about the addresses to avoid placing two or more addresses to the same mailbox on the same sublist. For example, addresses that are substantially similar (e.g., fred1@xyz.com and fred2@xyz.com) are deliberately placed on different sublists. Identifying an address on the list that is substantially similar to another address can be advantageously performed by a number of string comparison methods well known in the art. In one embodiment of the present invention, a first address is "substantially similar" to a second address if the first address at least 50% of its characters occur in the second address in the same order as in the first address. In another embodiment, two addresses are substantially similar even if they share fewer than 50% of the characters in either address, but contain the same distinctive string. For example, in this embodiment, the addresses A1XB4@zebra.com is "substantially similar" to A1XB4@phoenix.net. Even though both addresses share only a small string in relation to their sizes, there are grounds to suspect that they may pertain to the same user. Any convenient metric for determining substantial similarity can be used in accordance with the present invention, provided such a metric is designed to identify distinct addresses that are likely to point to the same mailbox* (Column 3, lines 10 – 34), compare with **assigning a spam value to each of a plurality of attributes of the message; obtaining a spam score for the message by summing the spam values; and determining if the message is likely to be flagged as spam by comparing the spam score to a spam threshold value.**

8. **Regarding dependent claim 13**, Hall teaches that *spammers (originators of spam) have no general way of telling when two addresses they have culled from newsgroups, web sites, etc, point to the same mailbox* (Column 2, lines 2 – 5) and that *A version is said to be "sent to a sublist" when it is sent to at least one address on the sublist. Memory 202 also stores a list and a sublist in one embodiment. Memory 202 is meant to encompass separate digital storage devices (e.g., a database, a remote hard disk, etc.); in other words, memory 202 encompasses distributed memory* (Column 5, lines 37 – 43), compare with **collecting user data from users of a plurality of websites; separately storing the user data for each website in a database, wherein the targeted group of users is selected from the user data stored for the website.**

9. **Regarding dependent claims 12, 14 and 15**, Hall teaches that the sender creates a different version of an e-mail message (e.g., spam) for each sublist. Examples of differences between versions include different source addresses, different subject lines and variations in the body of the message, and any combination thereof. Another method for systematic message version generation is based on the message originator creating a number paragraph-variant sets, where for one or more paragraphs in the original message, a collection of semantically equivalent, yet syntactically different, variants is created. Software can then generate message versions by systematically choosing one variant from each set of paragraph-variants to make up each version. This allows exponentially many message versions to be created from a small amount of spammer effort. The sender sends a different version of the message

to each sublist. In the example shown in FIG. 1, the sender sends a first version of the message to addresses A1 and B1 on sublist 1; a second version to addresses A2, B2 and C1 on sublist 2; and a third version to addresses A3 and C2 on sublist 3. As shown in FIG. 1, the messages first arrive at mail transfer agent 101. Mail transfer agent 101 stores information that lists the addresses for each mailbox. For example, the mail transfer agent 101 stores information that indicates that addresses A1, A2 and A3 indicate a single mailbox for user A 104; addresses B1 and B2 point to a single mailbox for user B 105; and addresses C1 and C2 point to a mailbox for user C 106. Mail transfer agent 101 implements a FDD process by detecting duplicate messages that are sent to the same mailbox. If two or more such messages are determined to be the same, then they are classified to be spam, and are prevented at the mail transfer agent 101 from being delivered to their intended recipient (mailbox). For example, the messages are deleted by the mail transfer agent 101. By splitting the senders address list into sublists, and sending different versions of a message to each sublist, the present invention advantageously circumvents the FDD process, and spam can be successfully delivered to its intended destination. In the example shown in FIG. 1, comparing the sender's messages to any one mailbox will show no duplication: three different versions are addressed to A1, A2 and A3, respectively, and two different versions are addressed to B1 and B2, respectively, and to C1 and C2, respectively (Column 3, line 59 – Column 4, line 35), compare with **adjusting at least one of the attributes of the message when the message is likely to be flagged as spam; and assessing whether the adjusted message is likely to be flagged as spam, and**



**selecting a template from a plurality of templates; inputting information for the message, wherein the message is generated using the selected template and the inputted information; designating a recipient criteria; determining the targeted group of users based on the recipient criteria; choosing a delivery mode from a plurality of delivery modes; and customizing the selected template when the message generated using the selected template is likely to be flagged as spam.**

Hall does not explicitly teach **establishing a delivery time for the message**, however, it would have been obvious to one of ordinary skill in the art to understand that Hall sends the messages disclosed in real time, since Hall teaches that *since messages can take widely different amounts of real time to travel the different routes, the question arises of how long to hold a message (waiting for possible duplicates) before presenting it to the user* (Column 7, lines 23 – 26).

10. **Regarding claims 1 – 8 and 16 – 20**, the claims incorporate substantially similar subject matter as claims 10 – 15 and are rejected along the same rationale.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall (US 6915334 B1) as applied to claims 1 – 8, and 10 – 20 above, and further in view of HysterCity.

12. **Regarding dependent claim 9**, Hall does not explicitly teach **a system for un-subscribing users, wherein unsubscribed users will not receive the message**. However, HysterCity does teach **a system for un-subscribing users, wherein unsubscribed users will not receive the message** (p 4, *To Unsubscribe*). It would

Art Unit: 2176

have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Hall with the disclosure of HysterCity, since Hystercity is a spammer that sends messages via mailing lists (pp 1 – 5).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NH

*William L. Bashore*  
WILLIAM BASHORE  
PRIMARY EXAMINER  
8/22/2005